

District 07 Mobility Performance Report

2016 Second Quarter

DEPARTMENT OF TRANSPORTATION

July 13, 2016
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EXECUTIVE SUMMARY

Overview

Caltrans District 7 contains two counties located in coastal southern California: Los Angeles and Ventura Counties. Both counties are urban counties, with Los Angeles as the most populous county in the United States at almost 10.1 million residents and Ventura County with 848,000 residents. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area land.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT))
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In this quarter, total delay equaled 15 million vehicle hours of delay (VHD) at the 35 mph speed threshold, an increase of 4% of the previous Quarter (2016 Q1), and 32.2 million VHD at the 60 mph threshold, an increase of 4.4% of previous Quarter. The average weekday delay experienced in this quarter was approximately 204 thousand VHD at 35 mph about the same as the Previous Quarter, and 428 thousand VHD at 60 mph, an increase of 0.5% of previous Quarter. In general Delays were up about 4% from last Quarter (2016 Q1) and where up about 11 % from year ago (2015 Q2).

Thursdays then Fridays are the most congested days of the week, with Peak hours extends from 6:00 am to 9:30 am and from 2:30 pm to 7:00 pm, while the Peak hour in the weekend (Saturday and Sunday) traffic is between 1:00 pm and 5:00 pm

Top Ten Bottlenecks for the Quarter 2

Rank	Fwy	Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Total Duration (hrs)
1	I405-S	Carson St.	PM	33.802	10.03	63	8.5	308,775	3.80
2	I210-E	East of I-605 Interchange	PM	37.389	R37.1	60	8.6	307,193	3.98
3	I405-S	Howard Hughes Pkwy	PM	48.672	24.9	62	6.3	298,715	3.69
4	I405-N	Nordhoff St.	PM	68.642	44.87	64	7.3	292,306	3.98
5	I10-E	West Covina Pkwy	PM	32.94	34.44	59	5.5	269,869	4.80
6	I405-N	Waterford St.	PM	55.882	32.11	62	4.1	193,264	3.77
7	I405-N	Palms Blvd	AM	52.312	28.54	62	6.0	188,802	2.81
8	I105-E	Long Beach Blvd.	PM	11.9	R11.9	64	5.7	182,969	4.65
9	I5-N	Riverside Dr.	PM	137.733	21.1	55	5.5	173,008	3.64
10	SR170-S	Magnolia Blvd	AM	2.346	R15.26	62	3.8	134,603	3.45

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<table><caption>Miles (Billions)</caption><thead><tr><th>Quarter</th><th>VMT (Billions)</th></tr></thead><tbody><tr><td>2015 Q2</td><td>9.2</td></tr><tr><td>2016 Q1</td><td>9.1</td></tr><tr><td>2016 Q2</td><td>9.5</td></tr></tbody></table>	Quarter	VMT (Billions)	2015 Q2	9.2	2016 Q1	9.1	2016 Q2	9.5	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2015 Q2	9.2										
2016 Q1	9.1										
2016 Q2	9.5										
		2.5%	3.5%								
Total Vehicle Hours of Delay (VHD) at 35 mph	<table><caption>Hours (Millions)</caption><thead><tr><th>Quarter</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2015 Q2</td><td>13.4</td></tr><tr><td>2016 Q1</td><td>14.4</td></tr><tr><td>2016 Q2</td><td>15</td></tr></tbody></table>	Quarter	VHD (Millions)	2015 Q2	13.4	2016 Q1	14.4	2016 Q2	15	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2015 Q2	13.4										
2016 Q1	14.4										
2016 Q2	15										
		12.2%	4%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<table><caption>Hours (Thousands)</caption><thead><tr><th>Quarter</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2015 Q2</td><td>181</td></tr><tr><td>2016 Q1</td><td>204</td></tr><tr><td>2016 Q2</td><td>204</td></tr></tbody></table>	Quarter	VHD (Thousands)	2015 Q2	181	2016 Q1	204	2016 Q2	204	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2015 Q2	181										
2016 Q1	204										
2016 Q2	204										
		12.3%	-0.3%								
Total Vehicle Hours of Delay (VHD) at 60 mph	<table><caption>Hours (Millions)</caption><thead><tr><th>Quarter</th><th>VHD (Millions)</th></tr></thead><tbody><tr><td>2015 Q2</td><td>29.3</td></tr><tr><td>2016 Q1</td><td>30.8</td></tr><tr><td>2016 Q2</td><td>32.2</td></tr></tbody></table>	Quarter	VHD (Millions)	2015 Q2	29.3	2016 Q1	30.8	2016 Q2	32.2	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2015 Q2	29.3										
2016 Q1	30.8										
2016 Q2	32.2										
		10%	4.4%								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<table><caption>Hours (Thousands)</caption><thead><tr><th>Quarter</th><th>VHD (Thousands)</th></tr></thead><tbody><tr><td>2015 Q2</td><td>390</td></tr><tr><td>2016 Q1</td><td>426</td></tr><tr><td>2016 Q2</td><td>428</td></tr></tbody></table>	Quarter	VHD (Thousands)	2015 Q2	390	2016 Q1	426	2016 Q2	428	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2015 Q2	390										
2016 Q1	426										
2016 Q2	428										
		9.7%	0.5%								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph	<p>Hours (Thousands)</p> <p>■ 2015 Q2 ■ 2016 Q1 ■ 2016 Q2</p> <p>Mon Tue Wed Thu Fri Sat Sun/Hol</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	Friday -3.3%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Friday 15.3%	Monday 9.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays	<p>Hours (Thousands)</p> <p>— Weekday (2015 Q2) — Weekday (2016 Q1) — Weekday (2016 Q2)</p> <p>Hour of Day</p>	Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		3 AM -25.8%	7 AM -15.7%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		4 PM 13.9%	3 PM 16.1%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays	<p>Hours (Thousands)</p> <p>— Saturday (2015 Q2) — Saturday (2016 Q1) — Saturday (2016 Q2)</p> <p>Hour of Day</p>	Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		3 AM -48.3%	7 PM -31.9%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		1 PM 22.3%	3 PM 25.5%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays	<p>Hours (Thousands)</p> <p>— Sunday/Holiday (2015 Q2) — Sunday/Holiday (2016 Q1) — Sunday/Holiday (2016 Q2)</p> <p>Hour of Day</p>	Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		9 PM -43.9%	6 PM -18.3%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		4 PM 22.1%	2 PM 42.8%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Millions)</p> <p>Los Angeles Ventura</p> <p>2015 Q2 2016 Q1 2016 Q2</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Los Angeles 12.6% ↑	Los Angeles 3.8% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>AM Peak (6 AM to 10 AM) Off-Peak Day (10 AM to 3 PM) PM Peak (3 PM to 7 PM) Off-Peak Night (7 PM to 6 AM)</p> <p>2015 Q2 2016 Q1 2016 Q2</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	AM Peak -8.6% ↓
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 7.6% ↑	Off-Peak Day 21.2% ↑
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>Average of Good Average of Bad</p> <p>2015 Q2 2016 Q1 2016 Q2</p> <p>6,607 6,117 6,332</p> <p>4,268 4,837 4,645</p>	Change in Good over one year ago	Change in Good over last quarter
		-4% ↓	4% ↑
		Change in Bad over one year ago	Change in Bad over last quarter
		9% ↑	-4% ↓

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2016 Q2-2015 Q2		Difference 2016 Q2-2016 Q1		Rank		
		2015 Q2	2016 Q1	2016 Q2	Absolute	Percentage	Absolute	Percentage	2015 Q2	2016 Q1	2016 Q2
I-405	Los Angeles	1,902,531	2,763,862	3,272,479	1,369,948	72.0%	508,617	18.4%	1	1	1
I-10	Los Angeles	1,803,968	2,069,768	1,869,641	65,673	3.6%	-200,128	-9.7%	2	2	2
I-5	Los Angeles	1,445,798	1,236,285	1,661,110	215,313	14.9%	424,826	34.4%	4	5	3
US-101	Los Angeles	1,677,112	1,275,118	1,276,871	-400,241	-23.9%	1,753	0.1%	3	3	4
I-210	Los Angeles	1,043,236	1,130,701	1,214,554	171,318	16.4%	83,853	7.4%	6	6	5
I-110	Los Angeles	1,110,246	1,251,608	1,039,713	-70,534	-6.4%	-211,895	-16.9%	5	4	6
SR-60	Los Angeles	870,828	860,125	811,886	-58,941	-6.8%	-48,239	-5.6%	7	7	7
I-605	Los Angeles	742,836	708,659	703,043	-39,793	-5.4%	-5,616	-0.8%	8	8	8
I-105	Los Angeles	498,145	547,427	636,042	137,897	27.7%	88,615	16.2%	10	9	9
SR-91	Los Angeles	500,271	511,521	575,223	74,952	15.0%	63,701	12.5%	9	10	10
SR-134	Los Angeles	218,997	357,447	354,710	135,713	62.0%	-2,737	-0.8%	14	11	11
SR-57	Los Angeles	402,652	326,920	350,338	-52,314	-13.0%	23,418	7.2%	11	13	12
US-101	Ventura	332,933	258,849	300,666	-32,267	-9.7%	41,818	16.2%	12	15	13
SR-170	Los Angeles	136,527	344,457	279,452	142,925	104.7%	-65,005	-18.9%	15	12	14
I-710	Los Angeles	317,829	296,042	213,602	-104,228	-32.8%	-82,440	-27.8%	13	14	15
SR-14	Los Angeles	116,695	152,355	156,775	40,080	34.3%	4,420	2.9%	16	16	16
SR-71	Los Angeles	114,678	152,321	130,744	16,065	14.0%	-21,578	-14.2%	17	17	17
SR-118	Los Angeles	78,596	88,277	70,201	-8,395	-10.7%	-18,076	-20.5%	18	18	18
SR-2	Los Angeles	44,022	55,979	46,294	2,272	5.2%	-9,685	-17.3%	19	19	19
SR-23	Ventura	12,868	36,883	35,018	22,150	172.1%	-1,865	-5.1%	21	20	20
SR-118	Ventura	15,463	19,818	26,545	11,082	71.7%	6,727	33.9%	20	21	21
SR-47	Los Angeles	2,327	412	2,287	-40	-1.7%	1,876	455.8%	22	23	22
SR-90	Los Angeles	307	2,097	1,068	761	248.2%	-1,030	-49.1%	23	22	23
TOTALS		13,388,865	14,446,930	15,028,261	1,639,396	12.2%	581,331	4.0%			

SR-118 Ventura in 2016-Q2 compared to 2015-Q2, delays are effected due to the detectors health

SR-90 Los Angeles 2016-Q2 difference from previous Quarter and Previous Year is relative to the small number of delay.

SR-47 Los Angeles 2016-Q1 change in delay is due to detectors health